

Mr. David Keith
Project Coordinator
Anchor QEA, LLC
614 Magnolia Avenue
Ocean Springs, MS 39654

RE: Draft Addendum 1 to the Sampling and Analysis Plan (SAP): TCRA Cap Porewater Assessment
San Jacinto River Waste Pits Superfund Site, Harris County, Texas
Unilateral Administrative Order, CERCLA Docket No. 06-03-10

Dear Mr. Keith:

The Environmental Protection Agency (EPA) and other agencies have performed reviews of the above referenced document dated October 23, 2015. The enclosed comments shall be incorporated in the Final Addendum 1 to the Sampling and Analysis Plan (SAP): TCRA Cap Porewater Assessment and copies provided for approval within 30 days of receipt of this letter.

If you have any questions, please contact me at (214) 665-8318, or send an e-mail message to miller.garyg@epa.gov.

Sincerely yours,

Gary Miller
Remediation Project Manager

Enclosure

cc: Satya Dwivedula (TCEQ)
Bob Allen (Harris County)
Linda Henry (Port of Houston Authority)
Angela Sunley (Natural Resource Damage Assessment Trustee Program, TGLO)

Comments

Draft Addendum 1 to the Sampling and Analysis Plan (SAP): TCRA Cap Porewater Assessment, dated October 23, 2015

1. Depending on the limitations of the available SPME (solid-phase micro extraction) technology, the PRPs shall ensure that the proposed approach is capable of detecting porewater concentrations at or below the human health Texas Surface Water Quality Standard (i.e., 7.97×10^{-8} ug/L (or 0.0797 pg/L) 2,3,7,8 –tetra-chloro-dibenzo-p-dioxin (TCDD) equivalents).
2. It is not clear if Figure 2 provides the number and locations of proposed pore water samples, or sampling performed in the past. In any case, the Addendum shall provide information on the number and types of samples to be collected, and provide a table of these samples, as was provided in Addendum 3 to the sediment sampling plan.
3. The Addendum shall include one additional porewater sampling location in the northwest portion of the cap where an area of rock displacement was identified.
4. The 2012 assessment targeted 2,3,7,8-TCDD and 2,3,7,8-TCDF in porewater. For the winter 2015/2016 monitoring, 2,3,4,7,8-PeCDF will be added to the analytes. The Kfw (fiber-water partition coefficients) are different than those used in 2012. Additionally, it is unclear if the fiber unit volumes are the same. The Addendum shall discuss the reason for this difference and how it may impact comparisons with the 2012 porewater results.
5. The Addendum estimated Kfw values for dioxins based on a regression equation correlating Kfw with octanol-water partition coefficients for PCBs, pesticides, and PAHs. There was a brief discussion on this derivation (i.e., Attachment 3). The Addendum shall evaluate the discussion in DiFilippo and Eganhouse (DiFilippo, E.L., and R.P. Eganhouse. 2010. Assessment of PDMS-Water Partition Coefficients: Implications of Passive Environmental Sampling of Hydrophobic Organic Compounds. Environmental Science and Technology. 44(18): 6917-6925), and determine if the conditions in the selected studies are similar to the expected site temperature and fiber coating thickness of the selected SPME fibers. The Addendum shall adjust the regression equation if this analysis indicates a need to re-evaluate the studies used in the Kfw and logKow correlation proposed for this study.
6. While the deployment of sampling devices is described in some detail, the procedures and Quality Assurance information for chemical analysis of the poly-di-methyl-siloxane (PDMS) fibers are not provided. The Addendum shall provide more detail on the analytical and quality assurance procedures, so that the quality of the results can be evaluated. The Addendum shall also discuss why it is necessary to limit analysis to only three of the seventeen dioxin/furan congeners that are typically quantified.